

LESSON 1

TOPIC 1

Workshop Introduction

SOILS AND FOUNDATIONS
WORKSHOP

***Soils and Foundations
Workshop***


***National Highway Institute
Course #132012***

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[illegible]

SOILS AND FOUNDATIONS
WORKSHOP

HOUSEKEEPING



Registration
Continuing Education
Credits
Breaks
Restrooms
Course Evaluation

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SOILS AND FOUNDATIONS
WORKSHOP

WHO ARE WE?

WHO ARE YOU?

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**SOILS AND FOUNDATIONS
WORKSHOP**

SEE ERRATA AT

**→ *WWW.FHWA.DOT.GOV/
BRIDGE***

→ *GEOTECHNICAL*

→ *PUBLICATIONS*

**→ *SOILS AND
FOUNDATIONS***

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SOILS AND FOUNDATIONS WORKSHOP

Workshop Introduction

Lesson 1 - Topic 1

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SOILS AND FOUNDATIONS WORKSHOP

Course Objective

- ***Participants will recognize the minimum acceptable level of geotechnical effort needed for the design and construction of a successful highway project.***

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SOILS AND FOUNDATIONS WORKSHOP

Overall Learning Objective

Participants will recognize the minimum levels of geotechnical knowledge and skill needed for a successful highway project and will be able to apply that knowledge to their local agencies and conditions.



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SOILS AND FOUNDATIONS WORKSHOP

Course Content

- **SITE EXPLORATION**
- **BASIC SOIL PROPERTIES**
- **LABORATORY TESTING**
- **SLOPE STABILITY**
- **EMBANKMENT SETTLEMENT**
- **SPREAD FOOTING DESIGN**
- **PILE DESIGN**
- **CONSTRUCTION ASPECTS**
- **FOUNDATION REPORT**



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SOILS AND FOUNDATIONS
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Definition of Learning Outcomes

<i>Knowledge</i>	<i>Skill</i>
<ul style="list-style-type: none">• <i>Ability to Understand a Technical Process</i>• <i>Learned by Presentation</i>	<ul style="list-style-type: none">• <i>Ability to Perform a Technical Task</i>• <i>Learned by Practice</i>

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SOILS AND FOUNDATIONS
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Acquired Knowledge vs. Acquired Skill

Categorize the Following Learning Results as Either Knowledge or Skill?

- ***List Pile Types***
- ***Evaluate Pile Design Alternates***
- ***Calculate Bearing Capacity***
- ***Construct an Effective Stress Diagram***
- ***Recall Exploration Equipment Types***
- ***Describe a Pile Load Test***

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